

A filtration apparatus and method for filtering a stream. The apparatus comprises a rotor that contains an inlet for the stream and an array of cavities operatively arranged to receive the stream from the impeller. The rotor member further includes membranes, operatively positioned within the array of cavities, for separating the impurities from the stream, and a permeate outlet for delivering a permeate from the rotor. A drive member is included for rotating the rotor so that the stream is exposed to a centrifugal force. In one preferred embodiment, the rotor contains a baffle plate to distribute the stream about the inner portion and an impeller vane adapted to receive the stream.

ABSTRACT OF THE DISCLOSURE